

CONTRACTING FOR A & E SERVICES

VIEWGRAPHS

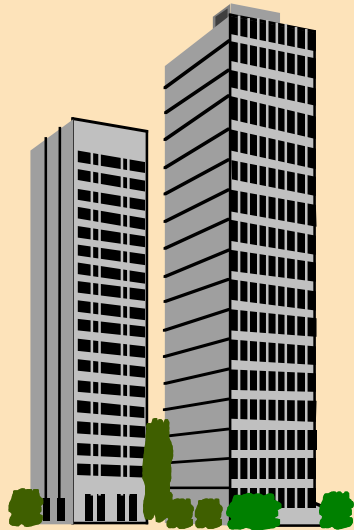
FEDERAL ACQUISITION INSTITUTE

**CURRICULUM OF PROCUREMENT
TRAINING COURSES**

**CURRENT THROUGH
FAC 90-37**

**OFFICE OF ACQUISITION POLICY
GENERAL SERVICES ADMINISTRATION**

CONTRACTING FOR ARCHITECT-ENGINEER SERVICES



A-E v. OTHER CONTRACTING

- | | |
|---------------------------|-------------------------|
| 1. PUBLIC LAWS | 8. SOLICITATIONS |
| 2. WAGE RATES | 9. BONDS |
| 3. SOURCES | 10. PRICING |
| 4. SYNOPSIS | 11. SELECTION |
| 5. OFFER FORMS | 12. AWARD FORM |
| 6. EVALUATION | 13. WARRANTIES |
| 7. CONTR. METHOD | 14. TERMINATION |
| 15. RESPONSIBILITY | |

ARCHITECT

Plans, Designs, & Organizes Services for Construction of Office Buildings, Factories, Residences.

- **Consults with Government.**
- **Consults with Others** (on site or financial analysis or feasibility studies).
- **Provides Info** (on cost & building time).
- **Provides Concept** (sketches, drawings, or specifications).

ENGINEER

Term Applied to Persons who Possess:

- **Educational Qualifications**
- **Work Experience**
- **Legal Certification** (where required as established by engineering boards or schools, or licensing authorities.)

ENGINEERING FUNCTIONS

- **RESEARCH & DEVELOPMENT**
- **DESIGN**
- **PRODUCTION**
- **CONSULTING**
- **ADMINISTRATION & MANAGEMENT**
- **TECHNICAL WRITING**
- **TECHNICAL SERVICE**

TYPICAL A-E FIRM

- CLIENT RELATIONS PERSON
- PLANNERS
- CONTRACT ADMINISTRATOR
- DESIGNERS
- CIVIL ENGINEERS
- ARCHITECTURAL DRAFTERS
- ENGINEERS (STRUCTURAL, MECHANICAL, & ELECTRICAL)
- LANDSCAPE ARCHITECTS
- SPECIFICATION WRITER



CONTRACTING FOR A-E SERVICES

- *TRADITIONAL*
- **CONSTRUCTION MGMT.**
 - **A-E and/or Const. Contractor**
- **DESIGN-BUILD or TURNKEY**

METHOD SELECTION CRITERIA

- **AGENCY POLICY**
- **URGENCY**
- **ADVANTAGES v. DISADVANTAGES**
- **EXISTING CONTRACTS (e.g. IQ)**
- **AVAILABILITY of FUNDS**
- **POLITICAL PRESSURES**

TRADITIONAL

TWO CONTRACTS AWARDED

1. DESIGN

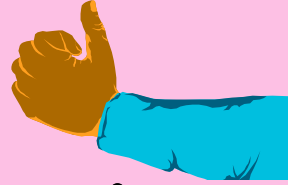
- **Contract A-E under Brooks Act**
- **Government in-house**

2. CONSTRUCTION

- **IFB or Negotiated Offers**

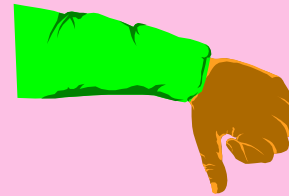
TRADITIONAL

ADVANTAGES:



- Selection on Qualifications not Price.
- Design Completed before Funding
- 2 Contracts Act as Check & Balance

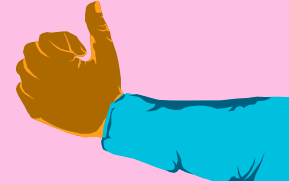
DISADVANTAGES:



- A-E often lacks Estimating Expertise
- A-E not a Construction Expert
- Long Timeframe for Linear Process

CONSTRUCTION MANAGEMENT

ADVANTAGES:



- Possesses Management Expertise.
- Prevents Inefficient Management.
- Relieves Govt. of Admin. Burden.
- Looks More Objectively at Design Ambiguities.
- May Deliver More Cost Effective Project.

CONSTRUCTION MANAGEMENT

DISADVANTAGES:



- **May be Lacking in Trained Personnel.**
- **Government May Lose Some Control.**
- **Less Reliance on Quality Control by Construction Contractor.**
- **Three Separate Entities to Deal with.**

DESIGN-BUILD

THREE ELEMENTS

- 1. Direct Interaction between A-E & Government (if desired).**
- 2. Strong & Knowledgeable Mgmt. of Project through all Phases.**
- 3. Short & Direct Lines of Communication between A-E, Govt. and Construction Team.**

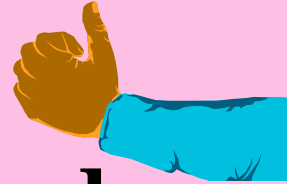
DESIGN-BUILD

APPROPRIATE WHEN PROJECT:

- **Is Repetitive in Nature (e.g. housing)**
- **Doesn't Need Detailed Govt. Input**
- **Is Complex & Govt. lacks Expertise**
- **Is Highly Classified**

DESIGN-BUILD

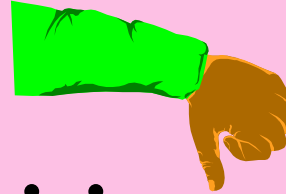
ADVANTAGES:



- Price known and agreed upon initially.
- Govt. relieved of admin. burden.
- Time saved by awarding only 1 contract
- Control kept by keeping rights to OK.
- Teamwork promoted.
- Only one entity to deal with.
- Designer & Builder on same team.
- Compatible with fast tracking.

DESIGN-BUILD

DISADVANTAGES:



- Govt. may give up decision making.
- Building codes evolved Traditionally.
- Competition limited.
- Quality may be sacrificed to cost.
- No checks & balances as in Traditional.
- Difficult to trace costs to Design or Construction.

TURNKEY

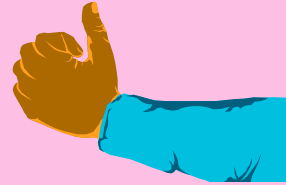
SIMILAR TO DESIGN-BUILD EXCEPT:

- **Contractor furnishes other services such as Financing, Site Selection, and Operating the Facility.**
- **Govt. does not have approval rights.**

Advantages & Disadvantages Similar to Design-Build.

IQ CONTRACTS

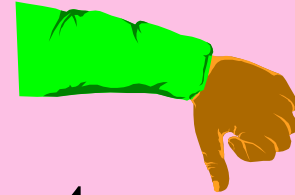
ADVANTAGES:



- **Time savings.**
- **Less administrative burden.**
- **Less time needed for negotiation.**
- **Simplified Statement of Work.**
- **Base year plus option for extension.**
- **Excellent for environmental work.**
- **Cost effective.**

IQ CONTRACTS

DISADVANTAGES:



- Not suitable for large projects.
- Estimate of need is sometimes difficult.
- Must be confined to specific type of work.
- Danger of not having the most qualified A-E for the project.

PARTNERING

STEP 1: Establish Personal Contact, Commitment.

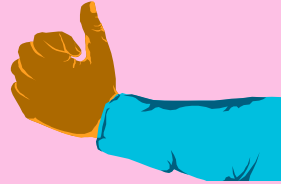
STEP 2: Approve Joint Statement of Mutual Goals.

STEP 3: Identify Disputes Prevention Process.

STEP 4: Establish Joint Workshops.

PARTNERING

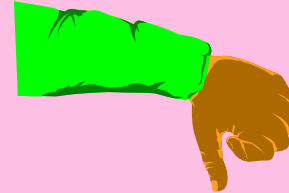
ADVANTAGES:



- **Creates a climate which fosters success.**
- **Removes adversarial attitudes.**
- **Establishes & maintains communication.**
- **Promotes & fosters cooperation.**
- **Harnesses capabilities, talents, and positive energies of both parties.**

PARTNERING

DISADVANTAGES:



- Govt. and A-E may become too close.
- Contract requirements may become relaxed.
- Too much concern on relationship as opposed to getting the job done.
- Not worth the time and effort.

DEFINITION OF A-E SERVICES

FAR 36.102

Professional services of an A-E nature:

1. As defined by State law, if applicable, which are required to be performed or approved by a person **LICENSED, REGISTERED, OR CERTIFIED** to provide such services;
2. Associated with research, planning, development, design, construction alteration, or repair of **REAL PROPERTY**; and
3. Or **INCIDENTAL SERVICES**, which members of the A-E professions (and individuals in their employ) may logically or justifiably perform.

EMERGING SMALL BUSINESS

FAR 19.1002

“A small business concern whose size is no greater than **50 % of the numerical size standard applicable to the Standard Industrial Classification (SIC) code assigned to a contracting opportunity.”**



COMPETITIVENESS DEMONSTRATION PROGRAM

FAR 19.1003

PURPOSE:

- “Test the ability of small businesses to compete successfully in certain industry categories without competition being restricted by the use of small business set-asides.”
- “Measure the extent to which awards are made to a new category of small businesses known as Emerging Small Businesses.”

A-E is one of the designated industries.

FIXED PRICE A-E CONTRACT PREFERRED

- **PROVIDES MAXIMUM INCENTIVE FOR A-E TO *CONTROL COSTS*.**
- **MOTIVATES A-E TO *PERFORM EFFICIENTLY*.**
- ***MINIMIZES ADMINISTRATIVE BURDEN* UPON CONTRACTING PARTIES.**

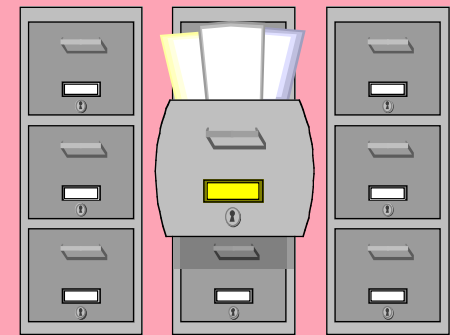
FIVE ELEMENTS IN THE SCOPE OF A-E SERVICES

- 1. Intent of Contract**
- 2. Project Description**
- 3. Estimated Cost of Construction**
- 4. Schedule of Submittals**
- 5. Special Considerations**

A-E QUALIFICATIONS DATA FILE

FAR 36.603

“ Agencies shall maintain offices or permanent **evaluation boards**, or arrange to use the offices or boards of other agencies, to receive and maintain data on firms wishing to be considered for Government contracts. . . . [and] shall maintain an A-E qualifications data file.”



A-E DATA FILES

A-E QUALIFICATIONS DATA FILE CONTENTS

- **Firm's Name, Address, and Phone #**
- **Geographic Area of Consideration**
- **Specialized Experience**
- **Professional Capabilities**
- **Capacity, with respect to SOW that can be Undertaken & Experience in CADD**
- **Small Business Size Status**
 - SDB
 - 8(a)
 - Emerging Small Business
- **Awards (Contract #, Date, Title, Amount)**

PRESELECTION (or Slate) & EVALUATION (or Select) BOARDS



- 1. Three or more Members.**
- 2. Appointment by Letter.**
- 3. Experience in Construction, A-E, or Acquisition.**
- 4. Can't Serve on both Boards.**

PRESELECTION (SLATE) BOARD FUNCTIONS

1. *Review* all qualified firms based on:

- 254s/255s
- CBD criteria
- Performance evaluations
- Spreading the work
- Quality control plans
- Small business classification

2. *List* but not rank at least 3 firms.

3. *Prepare* preselection report.

EVALUATION (SELECT) BOARD FUNCTIONS

FAR 36.602-3

- 1. *Review current* data files on firms listed in preselection report.**
- 2. *Evaluate* and *rank* in accordance with CBD criteria.**
- 3. *Hold discussions* with 3 top firms.**
- 4. *Prepare* selection report.**

RULES FOR INTERVIEWS

- **Follow Agency policy to decide need.**
- **Give advance notice to all firms.**
- **Provide instructions to Board members.**
- **Interview all firms.**
- **Ensure that all Board members participate.**
- **Do not discuss price.**
- **Face to face preferred but can use telephone.**

STRATEGY FOR INTERVIEWS

Develop Questions:

- **What is Design Team Composition?**
- **Nature of Quality Assurance?**
- **Any Time or Labor Saving Innovations?**
- **How much Work to be Subcontracted?**

?

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SHORT SELECTION PROCESS

FAR 36.602-5

- 1. Contract under \$25,000**
- 2. Selection by the Board**
 - Selection report serves as final ranking.
- 3. Selection by the Chairperson**
 - Chairperson performs Board functions.

RFP IS NOT AN AWARD

Costs of Preparing a Proposal

are considered

Costs of Doing Business and

will not be

Reimbursed by the Government.

ELEMENTS OF COST

- **DIRECT LABOR OR SALARY**
- **OVERHEAD ON DIRECT LABOR**
- **GENERAL AND ADMINISTRATIVE**
- **MATERIAL**
- **TRAVEL**
- **OTHER SIGNIFICANT ITEMS**
- **PROFIT**

REVIEWING THE A-E PROPOSAL

You must be familiar with the **Scope and be knowledgeable of:**

- **Structure of the Proposal,**
- **TINA Requirements,**
- **Cost Principals, and**
- **Elements of Cost Peculiar to A-E's.**

TYPICAL UNALLOWABLE COSTS

- **ADVERTISING**
- **BAD DEBTS**
- **DIVIDEND PROVISIONS**
- **FINES AND PENALTIES**
- **INSURANCE FOR ERRORS OR OMISSIONS**
- **CONTINGENCIES**
- **CONTRIBUTIONS**
- **ENTERTAINMENT**
- **LOSSES**

DIRECT COSTS

COST that can be Identified with a Particular Cost Objective:

- **SALARIES**
- **SHIPPING**
- **TRAVEL**
- **REPRODUCTION**
- **SOIL BORINGS**
- **SURVEYING**

DIRECT LABOR

RELATES TO AMOUNT OF EFFORT

HOW MANY:

- **DRAWINGS?**
- **HOURS OF ENGINEERING?**
- **HOURS OF DRAFTING?**
- **FIELD TRIPS?**

WHAT MAKES UP THE HOURLY RATE?

DIRECT MATERIAL

EXAMPLES:

- **PAPER**
- **MODEL BUILDING MATERIALS**
- **MYLARS**
- **TESTING CONSUMABLES (CHEMICALS)**
- **PHOTOGRAPHS**

TRAVEL

MUST COMPLY WITH JOINT TRAVEL REGULATIONS

- **HOW MANY TRIPS?**
- **HOW MANY PEOPLE ON EACH TRIP?**
- **HOW LONG WILL EACH TRIP BE?**
- **IS THIS TRIP NECESSARY?**

OTHER SIGNIFICANT COSTS

- **REPRODUCTION COSTS**
- **RENDERINGS OR MODELS**
- **SURVEYS**
- **CADD SYSTEM COSTS**
- **SOILS INVESTIGATIONS**
- **SPECIFIC CONSULTANTS**

CONSULTANT/SUBCONTRACTOR

- **SURVEYING/BORINGS**
- **INTERIOR DESIGN**
- **MODEL BUILDING**
- **ACOUSTICAL**
- **SPECIAL FINISHES**
- **ELECTRICAL**
- **MECHANICAL, ETC.**

INDIRECT COSTS

Those Costs that aren't considered Direct to the Project but are Expenses the A-E incurs in doing Business and can be spread Proportionately over all of its Business.

- **RENT**
- **PRINCIPAL'S SALARIES**
- **SECRETARY**
- **FRINGE BENEFITS**
- **SOCIAL SECURITY**
- **INSURANCE**
- **HOLIDAYS**
- **VACATION TIME**
- **ACCOUNTANT**
- **BONUSES**
- **UNEMPLOYMENT**

GENERAL & ADMINISTRATIVE

**MOST A-Es LUMP THEIR
OVERHEAD
INTO THE SAME COST POOL
AS THEIR
G & A .**

CERTIFICATION OF COSTS

- 1. THRESHOLD \$500,000**
- 2. SUBMIT DATAUSE SF 1411**
- 3. CERTIFY DATA ACCURATE,
 COMPLETE,
 CURRENT**

FACTUAL COSTS VS JUDGMENTAL COSTS

6% FEE

The 6% statutory fee limitation applies only to the **DESIGN services portion of the A-E's proposal:**

- **Working Drawings**
- **Specifications**
- **Construction Cost Estimate**

NEGOTIATION EFFECT

<u>Approach</u>	<u>Outcome</u>	<u>Result</u>
Maximize	Win/Lose	Renegotiation
Compromise	Lose/Lose	Dissatisfaction
Integration	Win/Win	Satisfaction

NEGOTIATION AGENDA

- 1. INTRODUCTIONS**
- 2. DIRECT LABOR FOR DESIGN SERVICES (6%)**
- 3. DIRECT LABOR FOR OTHER THAN DESIGN SERVICES**
- 4. COST REIMBURSABLE POOLS**
 - **TRAVEL AND PER DIEM**
 - **SITE INVESTIGATION**
- 5. GENERAL & ADMINISTRATIVE COSTS**
- 6. PROFIT**

CONSTRUCTIBILITY

Ease with which a Designed Project can be Built.

BIDDABILITY

Ease with which the Contract Documents can be Understood, Bid, Administered, and Enforced.

DESIGN REVIEW

- **Site Conditions and Restrictions**
 - Adaptations thereto
- **Sequence of Work**
- **Allowances for Space & Access**
- **Clarity & Consistency of Specs.**
- **Project Configuration/Design Features**
- **Economic Considerations**

SPECIAL REVIEWS

- **ARCHITECTURAL** Visual or environmental effects.
- **INTERIOR DESIGN** Walls, ceilings, floor construction.
- **ARCH. BARRIERS** Physically handicapped.
- **UTILITIES** Availability and types.
- **REAL ESTATE** Assurance that all rights, permits have been obtained.
- **ENVIRONMENTAL** A-E provides all permits required by the design manual.
- **FIRE PROTECTION** Assures there no fire hazards, and all codes are met.
- **INDUSTRY HYGIENE** Identify potential health hazards.

PURSUING A-E LIABILITY

- STEP 1:** Establish that problem is a design error or omission.
- STEP 2:** Determine if it was the A-E's failure to meet professional standards *or* a breach of contract.
- STEP 3:** Determine if Government has suffered damages and what the dollar value is.

CLAIMS & CHANGE ORDERS

STEP 1: Identify claim or change order.

STEP 2: Analyze delay time and cost.

STEP 3: Prepare and assemble systematic and accurate documentation.

STEP 4: Perform cost analysis and conduct negotiations.

ADMINISTRATIVE RECORD

- **Confirm Phone Calls by Written Memo.**
- **Log All Inquiries and Phone Calls.**
- **Periodically Review the Records.**
- **Correct or Rebut any Discrepancies in Writing.**
- **Stay on Top of the Project.**